## **ABSTRACT**

A network testing system for performing network simulation tests and traffic tests comprises an administrative workstation (2), a network testing apparatus (6) and a network device (8). The administrative workstation comprises a simulation test controlling module (24), a traffic generating parameter designing module (26), and a network model designing module (22). When the network testing apparatus is in a network simulating test mode, the simulation test controlling module is for transmitting simulation test parameters. The network testing apparatus is for selecting a network simulating model and a network protocol, and for controlling traffic generation to perform network simulation tests. When the network testing apparatus is in a traffic generator operating mode, the traffic generating parameter designing module is for transmitting the second traffic generating parameters. The network testing apparatus is for controlling traffic generation to perform traffic tests. A network testing method is also disclosed.